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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
HUA, LY	

ART UNIT	PAPER NUMBER
2135	6

DATE MAILED: 12/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Offic Action Summary	Application N .	Applicant(s)	
	09/362,041	SAITOH ET AL.	
	Examin r	Art Unit	
	Ly V. Hua	2131	

-- The MAILING DATE of this communication appears n the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-8 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) 1-8 are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Election/Restriction

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

a. Group I
   i. Claims 1 ans 2,
   ii. drawn to:
   (1)1 a digital signal processing apparatus
   (a) connected
   (i) to other digital signal processing apparatuses
   (ii) by means of a digital signal bus
   1) to transmit/receive a digital signal,
   (b) wherein said digital signal processing apparatus comprises
   (i) an interface circuit
   1) so that when said digital signal processing apparatus is powered on,
   I said interface circuit performs authentication between
   [1] said digital signal processing apparatus and
   [2] any of said other digital signal processing apparatuses
   [a] powered on
   [I] simultaneously with or before power-on of said digital signal processing apparatus; and

   (2)2 a digital signal processing apparatus
   (a) connected
   (i) to other digital signal processing apparatuses
   (ii) by means of a digital signal bus
   1) to transmit/receive a digital signal,
   (b) wherein said digital signal processing apparatus comprises
   (i) an interface circuit
   1) so that when powering-on of said other digital signal processing apparatuses is detected,
   I said interface circuit performs authentication between
   [1] said digital signal processing apparatus and
   [2] any of said other digital signal processing apparatuses;

   iii. classified in class 713, subclass 200.

b. Group II
   i. Claims 3 and 5,
   ii. drawn to:
   (1)3 a digital signal processing apparatus
   (a) connected
   (i) to other digital signal processing apparatuses
   (ii) by means of a digital signal bus
   1) to transmit/receive a digital signal,
   (b) wherein said digital signal processing apparatus comprises
   (i) an interface circuit
   1) which performs authentication between
   I said digital signal processing apparatus and
   II said other digital signal processing apparatuses
   III when said interface circuit is connected to said digital signal bus; and

   (2)5 a digital signal processing apparatus
   (a) provided with
   (i) a plurality of input terminals including
   1) an input terminal
   I from a digital signal bus and
   (b) connected

(i) to other digital signal processing apparatuses
(ii) by means of said digital signal bus
1) to transmit/receive a digital signal,
(c) wherein said digital signal processing apparatus comprises:
(i) a switching circuit
1) for selecting
I said plurality of input terminals; and
(ii) an interface circuit
1) which performs authentication between
I said digital signal processing apparatus and
II said other digital signal processing apparatuses
III when said input terminal connected to said digital signal bus is selected by said switching circuit; and

iii. classified in class 713, subclass 200.

c. Group III
i. Claim 4,
ii. drawn to:
(1)4 a digital signal processing apparatus
(a) connected
(i) to other digital signal processing apparatuses
(ii) by means of a digital signal bus
1) to transmit/receive a digital signal,
(b) wherein said digital signal processing apparatus comprises
(i) an interface circuit
1) which performs authentication between
I said digital signal processing apparatus and
II said other digital signal processing apparatuses
III when connection
[1] of said other digital signal processing apparatuses
[2] to said digital signal bus
[3] is detected; and

iii. classified in class 713, subclass 200.

d. Group IV
i. Claim 6,
ii. drawn to:
(1)6 a digital signal processing apparatus
(a) connected
(i) to other digital signal processing apparatuses
(ii) by means of a digital signal bus
1) to
I encrypt a digital signal and
II transmit/receive said encrypted digital signal,
(b) wherein said digital signal processing apparatus comprises:
(i) an interface circuit
1) which performs authentication between
I said digital signal processing apparatus and
II said other digital signal processing apparatuses ; and
(ii) a storage circuit for storing
1) a key used to decrypt
I said encrypted digital signal
[1] which is subjected to transmission/reception of between
[a] said digital signal processing apparatus and
[b] each of said other digital signal processing apparatuses; and

iii. classified in class 713, subclass 168.

e. Group V
i. Claim 7,
ii. drawn to:
(1)7 a digital signal processing apparatus

(a) connected
(i) to other digital signal processing apparatuses
(ii) by means of a digital signal bus
1) having
I a plurality of transmission channels
II to thereby
[1] encrypt
[a] a digital signal
[b] in accordance with copyright control information of said digital signal and
[2] perform
[a] transmission/ reception of said encrypted digital signal,

(b) wherein said digital signal processing apparatus comprises
(i) an interface circuit
1) which changes
I said transmission channels of said digital signal bus
II in accordance with said copyright control information
III when said digital signal is to be transmitted; and

iii. classified in class 713, subclass 168.

f. Group VI
i. Claim 8,
ii. drawn to:
(1)8 a digital signal processing apparatus
(a) connected
(i) to other digital signal processing apparatuses
(ii) by means of a digital signal bus to exchange a digital signal,
(b) wherein said digital signal processing apparatus comprises
(i) a circuit
1) for defining
I a name of said digital signal processing apparatus and
II names of said other digital signal processing apparatuses
[2] connected to said digital signal bus; and

iii. classified in class 713, subclass 200.

2. Inventions of Groups I to V and VI are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention of Groups I to V and VI has separate utility such as presented as follow. See MPEP § 806.05(d).

a. In the instant case, invention of each of the Groups I to V and VI has separate utility such as presented as follow:

i. The invention of Group I (claims 1 and 2) has a usage of authenticating between one digital signal processing apparatus and other digital signal processing apparatuses when a digital signal processing apparatus is powered on, which utility is not needed for any of the other invention of the other Groups.

ii. The invention of Group II (claims 3 and 5) has a usage of authenticating between one digital signal processing apparatus and other digital signal processing apparatuses when an authenticating entity residing in the one digital signal processing apparatus is connected to a bus, which utility is not needed for any of the other invention of the other Groups.

iii. The invention of Group III (claim 4) has a usage of authenticating between one digital signal processing apparatus and other digital signal processing apparatuses when the other digital signal processing apparatuses are connected to a bus, which utility is not needed for any of the other invention of the other Groups.

iv. The invention of Group IV (claim 6) has a usage of storing a key used to decrypt digital signal, which utility is not needed for any of the other invention of the other Groups.

v. The invention of Group V (claim 7) has a usage of changing
(1) transmission channels of a digital signal bus
(2) in accordance with copyright control information
(3) when a digital signal is to be transmitted,
which utility is not needed for any of the other invention of the other Groups.

vi. The invention of Group VI (claim 8) has a usage of defining
(1) a name of said digital signal processing apparatus and

(2) names of said other digital signal processing apparatuses,
which utility is not needed for any of the other invention of the other Groups.

3. Because these inventions are distinct for the reasons given above and the search required for one Group is not required for any of the other Groups, restriction for examination purposes as indicated is proper.

4. A telephone call was made to Mr. Carl Brundidge (Reg. No. 29,621) on September 30, 2003, to request an oral election to the above restriction requirement, but did not result in an election being made
Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

6. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703)872-9306, (for formal communications intended for entry)

or:

(703) 872-9306 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Ly Hua whose telephone number is (703) 305-9684. The examiner can normally be reached on Monday to Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sheikh, Ayaz, can be reached on (703) 305-9648. The fax phone number for this Group is (703) 305-3718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600.

LY V. HUA
PRIMARY PATENT EXAMINER
ART UNIT 2131

L. Hua
October 22, 2003